

EXECUTIVE SUMMARY

Kerala is considered as a land of abundant water resources with 44 rivers and a number of lakes and backwater lagoons. Kerala also receives significant amount of rainfall annually and is one of the top states in terms of annual rainfall in India. The rural population of Kerala is known to depend upon well water system. In Kerala, three fourth of the population has access to drinking water within their own premises. However, the statistics varied for different districts, with Idukki having only 41 *per cent* of the population with access to drinking water within the premises, while the reach was 85 in Kollam district. The quality of drinking water also varied across the districts.

When Government of India launched Jal Jeevan Mission (JJM) in 2019, Government of Kerala set for itself an ambitious target of service level at 100 litres per capita per day (lpcd) of drinking water to the rural community. With only less than 25 *per cent* coverage of rural households through tap water connection in 2019, the State aspired to provide 100 *per cent* of its rural population with Functional Household Tap Connections (FHTC) during the period 2020-25. Administrative sanction was accorded for providing FHTCs to 54.45 lakh households at a total cost of ₹44,714.79 crore.

Considering the significance of this intervention in the rural water supply landscape, we took up this audit to assess how far the objectives of the mission were achieved, in terms of planning, implementation, financial management and monitoring. Our examination yielded key insights on the effectuation of the scheme in Kerala.

The JJM was intended to be a community centric and community driven scheme with rural communities actively involved in the planning, implementation and management of water supply systems. However, we found that the Kerala Water Authority (KWA), an autonomous body under the Government of Kerala, remained the principal force propelling JJM. The KWA implemented the scheme through its divisions/subdivisions, drawing inputs from DPRs prepared autonomously, without any realistic assessment of felt needs at ground level. Though Village Water and Sanitation Committees (VWSC) and Village Action Plans (VAP) were built into the Operational guidelines of the scheme to instill a sense of ownership and intended to be a means of empowerment of rural marginalised communities, we noticed that VWSCs were constituted only in four out of 21 test-checked Grama Panchayats (GP) and VAPs were not prepared as envisaged. The State Action Plan did not flow out of District Action Plans and no comprehensive action plan was formulated for source sustainability measures and greywater treatment. The State had not formulated an Operation and Maintenance (O&M) Policy to ensure the sustainability and continuity of water supply systems. Furthermore, a suitable notification under the Panchayat Raj Act enabling formal transfer of drinking water management to the PRIs in line with the 73rd Amendment to the Constitution of India remained to be issued in the State. We noticed that, in the test-checked districts, no convergence plan with other programmes/ schemes like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Finance Commission (Tied Grant), Integrated Watershed Management Programme (IWMP), Swachh Bharath Mission (SBM) (Grameen), etc. was formulated to

facilitate utilisation of labour and financial resources for execution of projects under JJM.

Resultantly, though we saw significant headway in providing functional tap connections, we also noticed that 2,13,991 connections were disconnected within one month of providing the same, indicating disinterest of beneficiaries in the scheme. This was also seen reflected in the fact that only four test-checked GPs had collected community contribution which amounted to ₹131.40 lakh.

We also observed that in its effort to achieve 100 *per cent* coverage, the Government did not carry out realistic assessment of requirements through baseline surveys and prioritisation thereof, due to which specific interventions aimed at covering areas truly in need of water supply infrastructure, such as quality affected areas, aspirational district, Sansad Adarsh Gram Yojana (SAGY) villages, etc. did not materialise. We could not find any effective remedial action being taken by KWA/test-checked GPs to address the health hazards in water quality-affected habitations by operationalising sufficient number of Community Water Purification Plants (CWPPs). Not even a single FHTC was provided in the three ST dominated GPs, Agali, Pudur and Sholayur, selected for audit.

The scheme also faced significant delays, with only 51 *per cent* of the total 5,318 works completed in the five year period. Seventeen *per cent* of the works could not even commence. We saw that the major cause of these delays were the difficulties in obtaining permissions related to road cutting sanctions, with more than half of the total 7,458 applications relating to JJM works forwarded to various entities for obtaining road cutting sanction, still awaiting decisions. The average period of delay in obtaining sanctions from approving agencies ranged from 60 to 390 days.

In addition to these administrative delays, we also noticed that the delay in release of matching State share and the resultant short release of the GoI funds significantly added to the delays in implementation. Though the State's projected requirement of funds for JJM was more than six times the total outlay on the entire grant, the Government did not identify the sources for mobilising sufficient funds for completing JJM scheme, given that it was on a 50:50 sharing basis with GoI. Sufficient funds were not also forthcoming in the form of community contribution and local body contribution. The liquidity constraints had a bearing on the implementation of the scheme, with bills totaling ₹3,578.47 crore pending for payment to the contractors in the State, making them hesitant to take up new projects. The lack of interest amongst contractors was evident, with work packages valued at ₹3,625.72 crore remaining unawarded, further adding to the delays.

We also noticed several shortcomings in how the quality of water was monitored and the overall progress of the scheme was tracked. Regular and systematic water quality surveillance covering all water sources was not seen carried out and the results of samples which were tested positive were not shared with the community for remedial action. Third-party inspections of all engineering works executed under in-village infrastructure which were supposed to be carried out, were not seen conducted prior to release of payment. We also found that the Implementation Support Agencies (ISAs), which were supposed to assist in mobilising and engaging the communities to plan, design and

implement in-village water supply infrastructure were brought into the process only after the entire planning and mobilisation phase was already over, limiting the role and impact these agencies could have had. The Internet of Things (IoT) platform was not currently in place and mechanism for data governance and validation in respect of Integrated Management Information System (IMIS) needed to be strengthened.

Overall, while the implementation of JJM in Kerala made considerable progress in expanding functional household tap connection network across rural areas, the State could achieve only 52.46 *per cent* by March 2024, as against the targeted 100 *per cent* coverage of rural households with FHTCs. Furthermore, the implementation fell short in many critical areas of responsible and responsive participation of communities in ensuring long-term sustainability of the water supply systems. The absence of baseline surveys and prioritisation led to the low coverage of vulnerable areas, including quality-affected areas and tribal habitations. The sources for mobilising sufficient funds as against the huge amount of funds projected as required for implementation were not identified. Limited role of communities and GPs and administrative delays in issue of rail/road cutting sanctions as well as paucity of funds significantly affected the timely execution of works. Gaps in water quality monitoring and third-party oversight also affected overall execution of the scheme.

On the basis of an examination, the following recommendations are made:

Recommendations in this Report

- *Government may consider issuing notification under the KPR Act to facilitate devolution of drinking water management to PRIs in line with the 73rd Amendment to the Constitution of India, to facilitate community ownership and involvement.*
- *Government may draw out a comprehensive action plan including measures for source sustainability and greywater management under JJM.*
- *Government may ensure that a comprehensive O&M policy is formulated for projects implemented under JJM to cater to the sustainability and continuity of water supply systems.*
- *Government may ensure that Baseline surveys are undertaken in case of large, beneficiary oriented projects at the start of the project itself, to enable assessment of the percentage of households with access to safe drinking water in a village.*
- *Government may ensure that Village Water Sanitation Committees are constituted in all GPs in the State and that they function effectively as part of a decentralised and participatory institutional framework for implementation of JJM.*
- *Government may frame a clear road map for prioritising requirements under JJM and mobilising adequate financial resources to meet these requirements.*

- *Government may initiate action for the timely release of State share of funds for JJM and initiate steps to collect contributions from community and local bodies, promoting sense of ownership and increased participation in implementation of the scheme.*
- *Government may lay down a protocol for the implementing agencies of JJM on coordination with Departments and GPs for timely clearances for rail/road cutting.*
- *Government may ensure that Community Water Purification Plants are set up and made functional in water quality-affected habitations, so as to provide uninterrupted supply of potable water to meet the drinking and cooking needs of households.*
- *Government may ensure that KWA conducts water quality monitoring and surveillance programmes on a regular basis through Quality Control divisions and State/district/sub divisional laboratories and communicates test results to stakeholders in a timely manner.*
- *Government may ensure that KWA implements an appropriate measurement and monitoring system, leveraging Internet of Things (IoT) based technologies to strengthen the mechanism for data governance and validation in respect of IMIS (JJM).*